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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,409	12/11/2003	Phillip J. Gilmore	RAP04 P-647A	1408
28101	7590	06/20/2005	EXAMINER	
VAN DYKE, GARDNER, LINN AND BURKHART, LLP			DEUBLE, MARK A	
2851 CHARLEVOIX DRIVE, S.E.			ART UNIT	PAPER NUMBER
P.O. BOX 888695				
GRAND RAPIDS, MI 49588-8695			3651	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,409	GILMORE ET AL.	
	Examiner	Art Unit	
	Mark A. Deuble	3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3-8,10,12-17 and 22-340 is/are pending in the application.
- 4a) Of the above claim(s) 28-39 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-8,10,12-17, 22-27,40,42,43 and 46-59 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>121/11/16/03,4/26</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group II, claims 40 and 42-43, and species C in the reply filed on March 9, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). However, in view of the applicant's amendments, claims 1, 3-8, 10, 12-14, 16-17, 22-27 now read on the elected invention and will be treated on their merits.

2. Claims 28-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 9, 2005.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3-8, 10, 12-17, 22-27, 40, 42-43, 46-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 40 and 51 from which all claims depend state that "at least one of said booms is made substantially from a unitary sheet of metal substantially forming a horizontal belt supporting surface and support sides extending from said belt supporting surface..." This language renders the scope of the claims impossible to ascertain because it is unclear if this language requires a boom that comprises a unitary sheet of metal that substantially forms both

the horizontal belt supporting surface and the support sides or if this language only requires a boom that comprises a unitary sheet of metal that substantially forms the horizontal belt supporting surface and separate support sides. Appropriate correction is required.

Claims 49 and 58 include the terms "upstream" and "downstream" which are a relative terms which render the claim indefinite. The terms upstream and downstream have no meaning in the absence of a direction of conveyor operation. Furthermore, because the conveyor operates bi-directionally, the direction defined by the terms upstream and downstream change with the direction of conveyance. This renders the scope of the claims impossible to ascertain. It is recommended that the terms upstream and downstream be defined relative to the base of the conveyor or be replaced with other directional terminology.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 10, 40, 42-43, and 46-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilmore et al. (U.S. Patent No. 6,006,893).

Gilmore et al. '893 shows an extendable conveyor with a support structure 26 and extendable section 23 supported in cantilever fashion by the support structure, a plurality of booms 24 forming the extendable section that are extendable between a fully retracted position and a fully extended position, a conveyor belt 28 reeved among the booms to define a conveying surface, a drive formed by a motor (not shown) that is operated to drive the conveyor belt in

forward and reverse directions, and an operator panel 21 at an outer end portion of the extendable section that includes an input device that controls the extension and retraction of the extendable section. The support structure is mounted at the same general elevation as a support surface for a trailer into which the extendable section extends with an upward inclination so that an end portion of the extendable section opposite the support structure may be at an operator waist-high elevation. While Gilmore et al. '893 does not show the details of the extendable section of the conveyor, it states in column 4, lines 43-44, that the details are disclosed in U.S. Patent No. 5,351,809 (hereinafter Gilmore et al. '809). Gilmore et al. '809 shows that the booms are made from unitary sheet metal pieces 30 that form a horizontal belt supporting surface forming a substantial part of each boom. Each boom also includes support sides 78 extending downwardly from the belt supporting surface. Each of the sides includes a generally horizontal track surface 86 fixed at inwardly turned portions 88 of their bottom edges. These tracks are supported by cam followers 80 mounted on adjacent booms so that the outer booms are supported by their nearest inner boom in a fashion that allows the booms to nest within each other when fully retracted. As can be seen in Fig. 6 of Gilmore '809, horizontal beams extend along the bottom of each boom between the support sides. While it is unclear if these beams completely enclose the bottom sides of the booms, they may still be viewed as forming guards extending between portions of the support sides opposite the belt supporting surface because they would at least partially guard the bottom sides of the booms. Thus Gilmore et al. '893 and '809 show all the structure required by claims 40, 42, 46-48, 50-52, 54-57 and 59.

In regard to the limitations of claims 43 and 53 that the extendable section is bowed when in a fully extended position so that a central portion of the conveying surface is above an

imaginary straight line extending between opposite end portions of the conveying surface, it is noted that the booms 24 of Gilmore et al. as illustrated do not appear to be bowed. However, because the booms 24 have a long unsupported span when fully extended, some bowing of the booms would be inherent in Gilmore et al. especially if the conveyor was heavily loaded. When bowed in this fashion, the central portion of the conveying surface formed by the belt 28 would be above an imaginary straight line extending between opposite end portions of the conveying surface and upstream portions of the booms would be at a higher elevation relative to the imaginary straight line than downstream portions of the booms. Thus, Gilmore et al. would inherently have all the structure required by claims 43, 49, 53, and 58.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 10, 40, 42-43, and 46-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilmore et al. '893.

9. Assuming for the sake of argument that the language of claims 40 and 51 quoted above in the rejection under 35 U.S.C. § 112 is found to require that both the support sides and the horizontal belt supporting surface are formed from the same unitary sheet of metal, it should be noted that forming the boom as one integral piece rather than as several pieces rigidly joined together is deemed to have been an obvious design choice. See *In re Larson*, 340 F.2d 965, 144 USPQ 347, 349 (CCPA 1965) (A claim to a fluid transporting vehicle was rejected as obvious

over a prior art reference which differed from the prior art in claiming a brake drum integral with a clamping means, whereas the brake disc and clamp of the prior art comprise several parts rigidly secured together as a single unit. The court affirmed the rejection holding, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.").

10. Claims 1, 3, 10, 12-13, 40, 42-43, and 46-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilmore et al. '893 in view of Greasley (U.S Patent No. 3,826,353).

Gilmore shows generally that is required by the claims except for the electromechanical actuator and control required by claims 1 and for the friction device required by claim 13. However, Greasley shows a conveyor with an extendable section with an extendable boom 22 that is extended and retracted relative to a boom 19 by employing an electromechanical operator 50 that operates to impede movement of the belt with respect to the extendable section. A control extends the extendable section by controlling a drive to operate a conveyor belt 26 in one direction while controlling the electromechanical operator to impede movement of the conveyor belt with respect to the extendable section and it retracts the section by operating the electromechanical operator in the same fashion when the belt is driven in the opposite direction. The control deactivates the electromechanical operator while activating the conveyor belt drive to convey articles. Relative movement between the two booms during conveying is prevented by a brake assembly 41 between the two booms. This system advantageously allows the extendable section of the conveyor to be extended and retracted without a separate drive assembly for extending and retracting the boom. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the booms of Gilmore et al. with brakes

therebetween and with a control and electromechanical actuator in the fashion taught by Greasley. When this is done the resulting apparatus would have all the structure required by claims 1, 3, 10, 12-13, 40, 42-43, and 46-59.

Allowable Subject Matter

11. Claims 4-8, 14-17, and 22-27 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited by the examiner and not discussed above show extendable conveyors similar to that of the present invention.

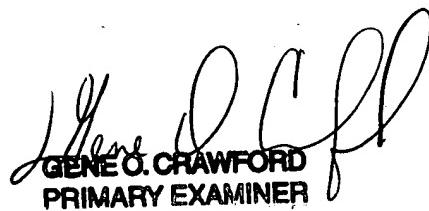
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md



The image shows a handwritten signature in black ink, appearing to read "Gene O. Crawford".

GENE O. CRAWFORD
PRIMARY EXAMINER